Chapter Three

How the Administration's Proposal Would Affect the Demand for Prescription Drugs

Of all the features of the Administration's proposed health care plan, universal coverage would have the greatest impact on the demand for prescription drugs. If it were enacted, this provision would extend a comprehensive package of health benefits, including coverage of prescription drugs, to the entire under-65 population, including 37 million people who are currently uninsured. The Administration's proposal for health care reform would also add a new drug benefit to Medicare, which is now the primary source of health insurance coverage for the 65-and-older population. Just under one-half of the 65-and-over population would receive drug coverage for the first time.

The Congressional Budget Office estimates that a universal entitlement to the standard benefit package in the Administration's proposal would increase spending on all prescription drugs by approximately 3 percent to 5 percent.[1] The proposed Medicare drug benefit would increase spending on all prescription drugs by an additional 1 percent. A high level of uncertainty underlies these estimates of what economists call induced demand.

CBO's estimates do not consider the effect that a greater shift to managed care plans might have on prescription drug expenditures. Prescription drug expenditures in managed care plans might be higher or lower than those in fee-for-service plans. Managed care plans might substitute prescription drugs for more expensive forms of treatment, thereby increasing prescription drug expenditures. But managed care plans might also exercise greater control over prescriptions, using generic drugs more intensively than fee-for-service plans, a policy that could lower prescription drug expenditures. CBO has not attempted to quantify these possible effects.

CBO's induced demand estimates are based on expenditures for outpatient prescription drugs reported in the 1987 National Medical Expenditure Survey.[2] These expenditures were not inflated to 1994 dollars because the induced demand estimates were based on the percentage of difference in average expenditures among groups. The estimates were calculated using the average percentage of difference in outpatient drug expenditures among people with different types of health coverage. These average expenditures have been adjusted for differences in population characteristics, specifically those according to health status, age, family income, sex, race and ethnicity, marital status, education, employment status, and region of residence. Underreporting is a problem in this survey, but does not affect CBO's analysis insofar as it is evenly spread among subgroups.

1. It is the combination of a universal entitlement with a generous benefit package (offering both comprehensive physician and drug coverage) that leads to CBO's estimate of induced demand. For the sake of brevity, this will be referred to as the universal coverage provision of the Administration's proposal.

2. This is a representative survey of the noninstitutionalized population in the United States. The tabulated results for prescription drug expenditures for 65-and-over Medicare enrollees were reported in the Congressional Budget Office study, *Updated Estimates of Medicare's Catastrophic Drug Insurance Program* (October 1989).

The Administration's Proposal for Universal Coverage

The extension of health coverage to all U.S. residents primarily affects the under-65 population because Medicare already covers 98 percent of the 65-and-over population.[3] Almost all uninsured U.S. residents are under age 65. CBO projects that the universal coverage component of the Administration's proposal (which includes a drug benefit) would increase the expenditures for prescription drugs by the under-65 population by 5 percent to 7 percent. Most of the increase would result from extending coverage to those who are currently uninsured and only a small fraction from currently insured people who would be receiving better drug benefits under the proposed standard benefit package. The increase would occur mostly in outpatient rather than inpatient prescription drugs. The under-65 population accounts for about two-thirds of all prescription drug expenditures.[4] Universal coverage would therefore increase total prescription drug expenditures by an estimated 3 percent to 5 percent.

Proposed Coverage

Under the Administration's proposal, the under-65 population would be covered by one of three basic plans, each of which would include coverage for both physician visits and outpatient prescription drugs. Much of the under-65 population already has employment-based physician and drug coverage that is similar to the coverage in the Administration's proposal.

The three basic types of plan included in the Administration's proposal are:

- A lower-cost-sharing plan that would employ a network of providers and require small copayments for most services;
- A higher-cost-sharing plan, under which patients would choose their providers, meet a deductible before coverage begins, and pay a coinsurance rate thereafter; and
- A combination plan under which patients would pay the lower-cost-sharing rates only if they use network providers, but would pay the higher-cost-sharing rates if they do not.

The lower-cost-sharing plan would require a $5 copayment for prescriptions and a $10 copayment for physician visits. The higher-cost-sharing plan would require that patients spend $300 on health services before physician coverage begins and $250 on prescription drugs before that coverage begins. A coinsurance rate of 20 percent would apply thereafter to most expenditures. One important advantage of the lower-cost-sharing plan would be that it has no deductibles. Each plan would limit annual out-of-pocket expenditures to $1,500 for individuals and $3,000 for families.

CBO did not determine which of the three kinds of plans would attract the most enrollees. The outcome would depend on how the public perceives differences in quality of care and how premiums vary among plan types (and within each regional alliance). CBO did not estimate how prescription drug expenditures would differ between the lower- and higher-cost-sharing plans. CBO's calculation of induced demand does not address the differences in coverage among the three kinds of plans.

Drug expenditures could be higher under the lower-cost-sharing plan for two reasons. First, the lower-cost-sharing plan would have no deductibles. In other words, coverage would begin with the enrollee's first physician visit and first prescription. Since the consumption of prescription drugs is closely associated with physician visits, this kind of coverage would tend to increase drug expenditures.[5]

3. Health Care Financing Administration, *Medicare and Medicaid Statistical Supplement* (1992), p. 14. Table 1 reports a lower number (96 percent) because it includes only those who obtain their primary coverage through Medicare.

4. Office of Technology Assessment, *Pharmaceutical R&D: Costs, Risks and Rewards* (February 1993), p. 239.

5. It is possible for those enrolled in fee-for-service plans to purchase supplemental coverage for cost sharing, in which case initial coverage would be as good as in the lower-cost-sharing plan.

Second, the lower-cost-sharing plan is likely to be a managed care plan such as a health maintenance organization (HMO), which may use prescription drugs more intensively. Nevertheless, drug expenditures in the lower-cost-sharing plan could be lower if it exercises greater control over prescription choice.

Employment-Based Coverage

According to the 1990 Current Population Survey, two-thirds of the population under age 65 obtain their primary health insurance coverage through their employers. The Administration's proposal for comprehensive coverage is roughly equivalent to that of many employment-based plans. This similarity implies that the prescription drug expenditures of people who are insured through their employers would not increase because their coverage would not change appreciably.

Employees who are now insured through firms employing more than 100 workers have coverage that is, for the most part, at least as good as that proposed in the higher-cost-sharing plan. According to a recent Bureau of Labor Statistics (BLS) publication that examines the health insurance benefits in firms employing 100 or more workers, 83 percent of full-time employees are covered by health insurance. Of those covered, two-thirds are in fee-for-service plans, 16 percent are in preferred provider organizations, and 15 percent are in HMOs. The average deductible is $198 and only 6 percent of those insured have a deductible of $300 or more.[6] The most common coinsurance rate is 20 percent, and all but 12 percent of those insured through a large employer have a coinsurance rate of 20 percent or less. Only 4 percent of people insured by these firms do not have outpatient prescription drug coverage. The fee-for-service plans typically do not have a separate deductible for prescription drugs, which means that their drug coverage is usually slightly better than the proposal's higher-cost-sharing plan.[7] Apparently, deductible and copayment policies covering drugs and physician visits are slightly more generous under the employment-based plans than they would be under the higher-cost-sharing plan proposed by the Administration, but are not usually as generous as the lower-cost-sharing plan.

Coverage is similar for people who are insured through firms that employ fewer than 100 workers. According to another BLS survey, although a lower proportion of full-time workers in these establishments have coverage through their employers (69 percent), people who are covered often have benefits similar to those of employees in larger companies. The average deductible is $197 and coinsurance rates of 20 percent are common. All but 3 percent of those insured have prescription drug coverage.[8] People who are insured through their employers would therefore probably not increase their prescription drug expenditures because their current coverage is usually about as good as that proposed by the Administration.

Outpatient Drug Demand and the Uninsured Under-65 Population

Increased demand for prescription drugs would result largely from extending coverage to the 17 percent of the population under age 65, or 37 million people, who have no health insurance (see Table 1). Those whose physician coverage would improve under the Administration's proposal or who currently do not have outpatient drug coverage would also increase their demand for prescription drugs. This outcome may apply to that portion of the population (7 percent) who are covered by policies that are privately purchased. The remaining three-quarters of the under-65 population already have physician and drug coverage through their employers or Medicaid that is for the most part as generous as that in the proposal's higher-cost-sharing plan. (The drug coverage currently provided by Medicaid typically has lower cost-sharing requirements than that proposed by the Administration.)

6. Bureau of Labor Statistics, *Employee Benefits in Medium and Large Private Establishments, 1991* (May 1993).

7. Cathy Baker and Natalie Kramer, "Employer-Sponsored Prescription Drug Benefits," *Monthly Labor Review* (February 1991), states that fee-for-service plans generally do not have a separate drug deductible, based on the Bureau of Labor Statistics results.

8. Bureau of Labor Statistics, *Employee Benefits in Small Private Establishments, 1990* (September 1991).

The amount by which prescription drug expenditures would rise if coverage were extended to the uninsured can be estimated using the outpatient prescription drug expenditures reported in the 1987 National Medical Expenditure Survey (NMES). According to this survey, average outpatient prescription drug expenditures for an uninsured person under 65 were about $35 in 1987. After adjusting for differences in population characteristics between the uninsured and those with employment-based coverage, CBO estimates that the uninsured under-65 population would have spent an average of about $62 per person (in 1987) if their coverage had been similar to that of those who had employment-based coverage.[9] This amount represents a 77 percent increase in outpatient prescription drug expenditures.

The comprehensive coverage proposed by the Administration is analogous to that of many employment-based plans. Logic would therefore suggest that the uninsured could increase their outpatient prescription drug consumption by approximately 77 percent under the Administration's proposal. Allowing for as much as a 25 percent error in this estimate indicates that the uninsured may increase their prescription drug expenditures by 58 percent to 96 percent under the Administration's proposal. This range is in line with other CBO estimates. Also based on the NMES, CBO has estimated that the uninsured would spend 57 percent more on all medical care if they were insured--a figure that is close to the lower end of the estimated range of increase.[10] Previous research by CBO and RAND indicates that prescription drug expenditures are closely tied to coverage of physician visits.[11] CBO has also estimated that the uninsured would spend 97 percent more on professional health services if they were insured. It might be reasonable to expect a similar increase in prescription drug expenditures.

Uninsured people constitute 17 percent of the under-65 population, but according to NMES they

Table 1.
Primary Source of Health Insurance for the U.S. Noninstitutionalized Population, by Age, 1993

Source of Insurance	Total	Under 65	65 and Over
	Population in Millions		
Employment-Based	147.8	146.4	1.4
Medicare	32.5	3.6	28.9
Medicaid	20.5	20.5	a
Department of Veterans Affairs[b]	0.8	0.8	a
Other Private	15.1	15.0	0.1
None	37.4	37.1	0.4
Total	254.2	223.4	30.8
	Percentage of Age Group		
Employment-Based	58	66	5
Medicare	13	2	94
Medicaid	8	9	c
Department of Veterans Affairs[b]	c	c	c
Other Private	6	7	c
None	15	17	1
Total	100	100	100

SOURCE: Congressional Budget Office tabulation of March 1993 Current Population Survey.

a. Less than 25,000.

b. Civilian Health and Medical Program for the Department of Veterans Affairs and the Civilian Health and Medical Program of the Uniformed Services.

c. Less than one-half of one percent.

9. The NMES expenditures were also adjusted upward by 10 percent to compensate for underreporting of drug expenses. The results of Marc Berk, Claudia Schur, and Penny Mohr, "Using Survey Data to Estimate Prescription Drug Costs," *Health Affairs* (Fall 1990), suggest that underreporting is larger as a percentage of average expenditures for those with low drug expenditures. This type of underreporting would tend to bias the induced demand calculation upward.

10. Congressional Budget Office, "Behavioral Assumptions for Estimating the Effects of Health Care Proposals," CBO Memorandum (November 1993). These estimates assume that the uninsured receive coverage similar to that currently provided by employment-based plans.

11. Congressional Budget Office, *Updated Estimates of Medicare's Catastrophic Drug Insurance Program.* The RAND studies include Willard Manning and others, "Health Insurance and the Demand for Medical Care," *American Economic Review*, vol. 77, no. 3 (1987), and Arleen Leibowitz, Willard Manning, and Joseph Newhouse, "The Demand for Prescription Drugs as a Function of Cost-Sharing," *Social Science and Medicine*, vol. 21, no. 10 (1985).

Table 2.
Induced Demand for Prescription Drugs by the Under-65 Population Under the Administration's Proposal for Universal Coverage (In percent)

Insurance Status	Share of Under-65 Population	Assumed Increase in Outpatient Prescription Drug Expenditures	Estimated Increase in Expenditures of the Under-65 Population	
			For Outpatient Prescription Drugs	For All Prescription Drugs[a]
Uninsured	17	58 to 96	4.5 to 7[b]	4 to 6[c]
Employment-Based Insurance Without a Drug Benefit	2	7.5 to 15	0.2 to 0.3	0.1 to 0.3
Privately Purchased Health Coverage	7	7.5 to 15	0.5 to 1	0.4 to 0.8
Total	26	n.a.	5 to 8	5 to 7

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Outpatient prescription drugs make up approximately three-quarters of the sales of all prescription drugs. Column 4 equals 77 percent of column 3.

b. This group accounts for only 8 percent of outpatient drug expenditures of the under-65 population. Calculation: (0.08)(58 to 96) = (4.5 to 7). The 8 percent is calculated by dividing the average expenditures of the uninsured by the average expenditures of all people under 65 (both according to the 1987 National Medical Expenditure Survey), then multiplying the result by the share of the population that is uninsured. Calculation: (35/76)(0.17) = 0.08.

c. Includes 0.6 percent from the increase in inpatient prescription drug expenditures.

account for only 8 percent of the outpatient prescription drug expenditures of this age group. If the uninsured were to increase their prescription drug expenditures by 58 percent to 96 percent, outpatient prescription drug expenditures of the entire under-65 population would increase by 4.5 percent to 7 percent (see Table 2).

Outpatient Drug Demand and Improved Coverage

The Administration's proposal would improve the coverage of people who are currently insured through their employers but lack drug benefits. The Bureau of Labor Statistics estimates that 3 percent to 4 percent of those with employment-based plans had no prescription drug coverage in 1991.[12] This group constitutes approximately 2 percent of the under-65 population (3.5 percent of 66 percent). CBO assumes, based on the NMES data, that adding a drug benefit alone to a group that already has physician coverage would increase outpatient prescription drug expenditures by 7.5 percent to 15 percent.[13] Giving a drug benefit to the 2 per-

12. Bureau of Labor Statistics, *Employee Benefits in Medium and Large Private Establishments, 1991*. Four percent of those who have employment-based health coverage through firms employing fewer than 100 workers also had no prescription drug coverage. See BLS, *Employee Benefits in Small Private Establishments, 1990*.

13. See the discussion below on the increase in prescription drug expenditures for the 65-and-over population that currently has coverage only through Medicare.

cent of the population who have only physician coverage through their employers is likely to increase the total outpatient demand of the under-65 population for prescription drugs by less than 1 percent.

Both physician and drug coverage would generally improve for the portion of the population that has private insurance. Privately purchased health coverage is often not as extensive as employment-based coverage. Nonetheless, the effects on the demand of the under-65 population for drugs prescribed on an outpatient basis would be relatively small because the group constitutes only 7 percent of its age category. If many in this group were to receive better physician and drug coverage, the percentage of increase in prescription drug expenditures should be close to the 7.5 percent to 15 percent calculated for those who already have adequate physician but not drug coverage. CBO assumes that under the Administration's proposal those who have private coverage would also increase their outpatient prescription drug expenditures by 7.5 percent to 15 percent. If that took place, the result would be an increase in demand of about 1 percent for outpatient prescription drugs by the entire under-65 population.

Inpatient Drug Demand

If the Administration's proposal for universal coverage were enacted, those who are currently uninsured would also expand their inpatient use of pharmaceuticals because they would tend to increase their use of hospital services. According to calculations based on the NMES, those who were not insured spent $330 a year in 1987 on hospital services (inpatient, outpatient, and emergency). If their coverage had been comparable to an employment-based plan, they would have spent $424 a year (adjusting for differences in population characteristics)--an increase of 28 percent. The uninsured account for about 10 percent of total hospital expenditures. Thus, a 28 percent increase in hospital expenditures by those who are currently uninsured implies that total hospital expenditures could rise by approximately 3 percent.[14] Assuming that inpatient prescription drug expenditures are a constant proportion of all hospital outlays, expenditures for inpatient prescription drugs could also rise by about 3 percent. Because the hospital market is roughly 23 percent of the total prescription drug market, the total prescription drug expenditures for the under-65 population would increase by less than 1 percent (0.6 percent).

Total Increase in Demand for the Under-65 Population

Taken together, these calculations indicate that all prescription drug expenditures of the under-65 population might rise from 5 percent to 7 percent if the comprehensive coverage included in the Administration's proposal for health care reform were extended to this entire age group (see the last column of Table 2). The estimate does not take into account the effect that a large shift to managed care plans might have on the demand for prescription drugs. Nor does it account for a greater use of generic drugs. Because of the uncertainties involved in the induced demand calculations, Chapter 6 considers a broader range of changes.

Medicare's New Drug Benefit

The Administration's proposal would add a new drug benefit to Medicare. Because this would give many Medicare enrollees drug coverage for the first time, the demand for pharmaceuticals would increase. CBO estimates that the demand for outpatient prescription drugs by the 65-and-over population would rise by about 4 percent as a result of expanded Medicare coverage. Because the outpatient market constitutes 77 percent of all prescription drug expenditures, and the 65-and-over population accounts for one-third of all spending on prescription drugs, the new Medicare drug benefit would increase total U.S. expenditures on prescrip-

14. The calculation: 10 percent of 28 percent is 2.8 percent (rounded to 3 percent). The 10 percent is calculated by dividing average expenditures for the uninsured on hospital services by average expenditures of the entire under-65 population on hospital services and multiplying that result by the proportion of the population uninsured in 1993, that is ($330/$551)*0.17 = 0.1.

tion drugs by 1 percent. About 1 percent of the under-65 population is also insured through Medicare. Therefore, this new drug benefit would also have a very small effect on the prescription drug expenditures of those who are under 65.

Under the Administration's proposal, the new prescription drug benefit would require a patient to meet a $250 deductible before prescription drug coverage begins and would apply a 20 percent coinsurance rate thereafter. The benefit would include an annual catastrophic cap of $1,000; once the patient had spent $1,000 on prescription drugs, all further expenditures on prescription drugs would be covered in full.

There are currently two types of Medicare coverage: Hospital Insurance (HI) and Supplementary Medical Insurance (SMI). Hospital Insurance is available to all Social Security beneficiaries and requires no premium. Those who are 65 and over and are not eligible for Social Security may buy HI at a monthly premium of $245. Hospital Insurance covers inpatient hospital services, some skilled nursing facility services, and hospice care. Enrollment in the SMI program is voluntary and requires a premium ($41.10 a month). Even people 65 and over who are not eligible for Social Security can buy SMI coverage at the regular premium. Supplementary Medical Insurance covers physician visits, outpatient hospital services, and laboratory services after a $100 deductible is met. SMI covers 96 percent of Medicare enrollees who are 65 and over.[15] The proposed drug benefit would be added to this second part of Medicare. The current SMI premium is set to cover one-fourth of the cost of the benefits and the federal government pays the rest. The SMI premium would be increased to cover one-fourth of the cost of this new drug benefit.[16]

The proposed Medicare drug benefit plan would encourage substitution of generic drugs. For multisource drugs, the reimbursement limit would be based on the wholesale price of the drug that falls in the middle of the group when drugs are ranked by price (the median price). A drug is classified as multisource if other bioequivalent substances are on the market, a situation that occurs either because the patent has been licensed so that more than one brand-name version exists, or because the patent has expired and there are generic substitutes. If there are more generic than brand-name forms of the drug, the reimbursement limit would be determined by a generic drug. In this instance, a Medicare patient would have to pay extra for choosing a brand-name drug. The reimbursement limit would also apply when calculating the amount spent to reach the $250 deductible. This lower reimbursement limit on multisource brand-name drugs, however, would not apply if the physician specifically prescribes the brand-name drug.

CBO did not take into account greater substitution of generic drugs in its induced demand calculations. The most important reason for excluding generic substitution from the induced demand estimates was not because it was difficult to gauge. Generic substitution begins to erode sales only after the brand-name drug's patent has expired (or the patent on one of its brand-name competitors has expired). During the first 7 to 12 years that a brand-name drug is on the market, it will not usually face competition from generic substitutes. If induced demand is estimated at 5 percent, a brand-name drug's sales should increase by an average of 5 percent in the years before generic competition is faced. When analyzing the changes in returns from drug development, CBO took into account increased substitution of generic drugs by examining greater sales erosion at the end of a brand-name drug's life, rather than by lowering the induced demand estimate.

Calculating Induced Demand

Most Medicare enrollees (96 percent) participate in the SMI program. They must meet a $100 deductible before coverage begins. Thereafter, a 20 percent coinsurance rate applies. Thus, almost all Medicare enrollees are covered for physician visits and other basic health services, even if they do not carry supplemental coverage. In 1991, only 11 percent of 65-and-over Medicare enrollees had no coverage supplementing Medicare (see Table 3).

15. Health Care Financing Administration, *Medicare and Medicaid Statistical Supplement*, p. 14.

16. The increase would be larger for very high-income Medicare enrollees.

Table 3.
Induced Demand for Outpatient Prescription Drugs by Medicare Enrollees 65 and Over

Insurance Status	Share of Total 65-and-Over Medicare Enrollees[a] (Percent)	Average Outpatient Drug Expenditures per Enrollee in 1987[b] (Dollars)	Assumed Increase in Outpatient Drug Expenditures (Percent)	Corresponding Increase in Total Outpatient Drug Expenditures of 65-and-Over Medicare Enrollees[c] (Percent)
Supplemental Coverage				
Individually purchased (medigap)	37	267	7.5	2.7
Employment-based retirement plans	38[d]	287[e]	0	0
Medicaid: dual eligibles	9	292	0	0
Qualified Medicare beneficiaries	3	N.A.	7.5	0.2
Other	2	N.A.	7.5	0.1
No Supplemental Coverage	11	179	7.5 to 15	0.7 to 1.3
Total	100	n.a.	n.a.	3.7 to 4.4

SOURCE: Congressional Budget Office. Column 1 is based on George S. Chulis and others, "Health Insurance and the Elderly," *Health Affairs* (Spring 1993).

NOTE: N.A. = not available; n.a. = not applicable.

a. Based on Round 1 of the 1991 Medicare Current Beneficiary Survey (from Chulis and others). Includes the institutionalized population.

b. Based on the 1987 National Medical Expenditure Survey. Adjusted to control for health status, age, family income, sex, race and ethnicity, marital status, education, employment status, and region of residence. Adjusted upward by 10 percent to account for underreporting. Underreporting will not affect the analysis insofar as it is evenly spread among subgroups.

c. Column 4 equals column 1 times column 3 times average expenditures of subgroup divided by average expenditures of all 65 and over Medicare enrollees. 2.7 equals (0.37)(7.5)(0.99) and 0.7 to 1.3 equals (0.11)(7.5 to 15)(0.77). Total has been rounded.

d. Includes 5 percent who have both employment-based and individually purchased supplemental coverage.

e. People with union-based retirement plans, which tend to have more generous benefits than employer-based retirement plans, are not included in this average.

Supplemental coverage picks up the coinsurance payments (and occasionally the $100 deductible) required by Medicare and may offer such additional benefits as drug coverage. Thirty-seven percent of 65-and-over Medicare enrollees had supplemental coverage through individually purchased plans (medigap) in 1991. Most of these plans do not offer a drug benefit.[17] If a drug benefit were added to Medicare, those people who do not have supplemental coverage and those who have only private medigap coverage would increase their demand for pharmaceuticals.

People who have employment-based retirement plans typically have both supplemental physician and drug coverage. The employment-based retirement plans generally do not have a separate deduct-

17. One estimate, based on the NMES, states that 19 percent of those people who have purchased medigap plans individually have prescription drug coverage. See Stephen H. Long, "Prescription Drugs and the Elderly: Issues and Options," *Health Affairs* (Spring 1994), p. 161. Currently, the only drug coverage that a private supplemental medigap plan may offer has a separate $250 deductible and a 50 percent coinsurance rate.

ible for prescription drugs and some require that beneficiaries pay only $1 to $4 per prescription.[18] Currently, 74 percent of people who work for firms employing 100 workers or more and who will obtain health benefits from their employers on retirement at age 65 will see little change in their coverage.[19] Such evidence suggests that the drug coverage offered by employment-based retirement plans is usually as generous as the proposed Medicare drug benefit. Therefore, no change in demand is predicted for this group.

Private Supplemental Coverage (Medigap). Retirees age 65 and over who have employment-based plans spend 7.5 percent more on outpatient prescription drugs than those who are insured through medigap plans (see Table 3). The increase is probably attributable to the addition of drug coverage; employment-based retirement plans typically offer a prescription drug benefit and most medigap plans do not. CBO therefore concludes that the expenditures for outpatient prescription drugs by 65-and-over Medicare enrollees who are insured through supplementary plans that do not frequently offer drug benefits would increase by 7.5 percent if the proposed prescription drug benefit were added to Medicare. Enrollees who have supplementary coverage that is equal to or better than the proposed drug benefit are not expected to change their spending on drugs.

Those Eligible for Both Medicare and Medicaid. Qualified Medicare beneficiaries (QMBs) constitute another group of people who have supplemental coverage but no drug benefits. These Medicare enrollees also qualify for assistance from Medicaid, but are not eligible for Medicaid's drug benefit. The income ceiling for QMBs was phased in at 85 percent of the poverty line in 1989 and reached 100 percent of the poverty line in 1992. It will rise to 120 percent of the poverty line in 1995. For those in this group who are at or below the poverty line, Medicaid picks up the premiums, coinsurance, and deductibles required by Medicare's Supplementary Medical Insurance program. Medicaid picks up only the Medicare premium for those with incomes above the poverty line (hence these QMBs have no Medicaid coverage supplementing Medicare's cost-sharing requirements). Because the QMB program did not exist in 1987, the increase in the number of Medicare enrollees who were also eligible for Medicaid between 1987 and 1991 can be viewed as a first approximation of the size of the QMB population. According to the 1987 NMES survey, 7.6 percent of Medicare enrollees were also eligible for Medicaid (these were all dual eligibles). According to the 1991 Medicare Current Beneficiary Survey, 11.9 percent of Medicare enrollees were also covered by Medicaid--an increase of 4 percentage points.

Since the number of dual eligibles did not increase much between 1987 and 1991, CBO viewed the 4 percentage point rise as indicative of the portion of the 65-and-over population who are QMBs with incomes at or below the poverty line. (All QMBs had incomes at or below the poverty line in 1991.) Some of this 4 percentage point increase, however, occurred because the institutionalized Medicare population was counted in the 1991 survey but not in 1987. The portion of this group that qualifies for Medicaid is greater than that of the entire 65-and-over population. Hence, the number of QMBs may have been lower than 4 percent of all 65-and-over Medicare beneficiaries in 1991.[20]

For the purpose of this induced demand calculation, CBO assumes that the number of QMBs at or below the poverty line is equal to 3 percent of all 65-and-over Medicare enrollees. Because this group, like most of those who have private supplemental insurance, has supplemental physician coverage but no drug coverage, CBO assumes that people in it would also increase their outpatient prescription drug expenditures by 7.5 percent if the proposed drug benefit were added to Medicare.

18. Congressional Budget Office, *Updated Estimates of Medicare's Catastrophic Drug Insurance Program*, p. 51.

19. Bureau of Labor Statistics, *Employee Benefits in Medium and Large Private Establishments, 1991*, Table 63.

20. Based on state-level data obtained from the Health Care Financing Administration, the Congressional Research Service reports that the number of QMBs was 1.3 million in 1992, or almost 4 percent of the Medicare population. See Congressional Research Service, *Medicaid Source Book: Background Data and Analysis* (January 1993). This number includes many people who not only qualified for Medicaid under the QMB standards but also were eligible for Medicaid's drug benefit. At the same time there were reporting problems that could make this estimate too low.

Other Supplemental Coverage. The induced demand estimate presumes that people who have some type of unspecified supplemental coverage would also increase their outpatient drug expenditures by 7.5 percent if the drug benefit were added to Medicare. The group is so small, however, that the effect on the induced demand estimate is slight.

Those Without Any Supplemental Coverage. It is assumed that people who have no supplemental coverage would increase their outpatient prescription drug expenditures by 7.5 percent to 15 percent under the Administration's proposed Medicare drug benefit. Medicare enrollees who are 65 years old and older, and who have supplemental coverage through employment-based retirement plans, spend an average of 60 percent more on prescription drugs than those who have no supplemental coverage (see Table 3). But a large part of this difference is attributable not to drug coverage but to the fact that many employment-based retirement plans offer supplemental coverage that picks up some of Medicare's cost-sharing requirements. The Administration's proposal affects drug coverage, but for the most part not Medicare's deductibles and copayments.[21] It is therefore necessary to determine the portion of this 60 percent difference that stems from drug coverage alone.

Medicare enrollees who are 65 and over and have employment-based retirement plans spend about 7.5 percent more on prescription drugs than those who have private supplemental coverage (medigap), which usually does not include drug coverage. Therefore, it is assumed that at least 7.5 percentage points of the 60 percent difference is attributable to drug coverage.[22] Another argument suggests that up to 10 percentage points of the 60 percent difference could be attributed to prescription drug coverage. Those who have no supplemental coverage would have to spend 50 percent more on prescription drugs to catch up with those who have medigap coverage, plus an additional 10 percent to catch up with those whose coverage is employment based (and who usually have a drug benefit). In addition, private medigap plans may pick up the coinsurance payments required by SMI more often than employment-based plans. Those who have medigap coverage may spend almost as much on prescription drugs as those who have employment-based plans, partly because they have better physician coverage. It follows that the amount of the 60 percent difference that is attributable to drug coverage could be greater than 10 percentage points.

According to CBO tabulations of NMES data, people who have no supplemental coverage purchased an average of 12 prescriptions a year, whereas retirees who have employment-based supplemental coverage bought an average of 16.6 prescriptions per year, an increase of 38 percent. Therefore, of the 60 percent difference in outpatient drug expenditures between those who have no supplemental coverage and retirees who have employment-based supplemental coverage, 38 percent is attributable to a greater quantity of drugs purchased and 16 percent is attributable to a higher price.[23] Drug coverage should increase both the quantity and the price of prescriptions purchased, whereas physician coverage should primarily affect the quantity of prescriptions purchased.[24]

Previous RAND and CBO studies indicate that most of the 60 percent difference should be attributed to increased physician coverage alone.[25] Attributing only the price increase to drug coverage implies a 16 percent increase in outpatient drug expenditures for those who have no supplemental coverage. On the basis of this calculation and the results of previous studies, if a prescription drug benefit was added to Medicare, the most that prescrip-

21. The proposal would introduce coinsurance payments on lab services.

22. Congressional Budget Office, "Behavioral Assumptions for Estimating the Effects of Health Care Proposals."

23. If the quantity purchased rises by 38 percent on average, then the price paid must rise by 16 percent on average to get a 60 percent increase in expenditures.

24. Congressional Budget Office, *Updated Estimates of Medicare's Catastrophic Drug Insurance Program*, pp. 47-50. These figures were adjusted to account for differences in population characteristics.

25. The RAND studies include Manning and others, "Health Insurance and the Demand for Medical Care," and Leibowitz, Manning, and Newhouse, "The Demand for Prescription Drugs as a Function of Cost-Sharing."

tion drug expenditures could increase for those who have no supplemental coverage is assumed to be 15 percent. Consequently, a range of 7.5 percent to 15 percent is used to reflect the probable response of this group, which now has no supplemental coverage.

Total Demand Would Increase. On the basis of these estimates, if the proposed prescription drug benefit were added to Medicare, the outpatient prescription drug expenditures of all 65-and-over Medicare enrollees would increase by about 4 percent (see Table 3). The amount that prescription drug coverage is estimated to increase for each group discussed above is weighted by the group's share of total prescription drug expenditures (by all 65-and-over Medicare enrollees). This weight takes into account the size of the group in relation to the entire Medicare population as well as the average prescription drug expenditures of each group.[26] Most of the increase in demand results from extending drug coverage to those currently covered by medigap plans and to the 11 percent of the elderly who currently have no supplemental coverage at all.

One percent of the 65-and-over population has no health insurance at all. Under the Administration's proposal, this group would be compelled to buy into either Medicare's SMI program or a comprehensive plan offered by a health alliance. The drug benefit that would be offered by Medicare is almost identical to that offered under the high-cost-sharing plan. Therefore, whether they get it through Medicare or an alliance plan, those who are 65 and over and uninsured will obtain coverage that includes a drug benefit. No survey numbers are available on which to base an induced demand estimate for this group. The estimate is therefore based on the 77 percent increase in expenditures projected for the uninsured people under 65. It follows, then, that if and when those who are not only 65 and over but uninsured as well receive coverage for the first time, the expenditures of all those 65 and over on outpatient prescription drugs would increase by no more than one-half of one percent.[27]

The Administration's proposal would increase the outpatient prescription drug expenditures of 65-and-over Medicare enrollees by about 4 percent. In 1990, 29.4 million U.S. residents 65 years old or older were enrolled in the SMI program. The total number of people in the United States 65 years old or older was 31.1 million. Therefore, approximately 95 percent of the 65-and-over population is covered by Medicare's SMI program.[28] Taking into account the small increase caused by extending drug coverage to the uninsured 65-and-over population, CBO estimates that the increase in outpatient prescription drug expenditures for all people 65 and over would also be about 4 percent.

Approximately 3.6 million Medicare enrollees are under age 65. They constitute less than 2 percent of the under-65 population (see Table 1). Because they are such a small portion of the under-65 population, their increase in outpatient drug expenditures under Medicare's new drug benefit would not alter the estimated 5 percent to 7 percent increase in prescription drug expenditures for the population that is under 65 years old.

Conclusions

CBO calculates that universal coverage as proposed by the Administration could increase the under-65 population's demand for prescription drugs by approximately 5 percent to 7 percent. Because two-thirds of all prescription drugs are purchased by people under age 65, the resulting increase in demand would cause total prescription drug expenditures to rise by 3 percent to 5 percent. Most of the increase in demand would result from extending coverage to the 37 million uninsured (99 percent of

26. In constructing these weights, CBO assumes that the average expenditures of those with "other" coverage and those with Medicaid but no drug benefit are the same as the average expenditures of those with coverage through medigap, since these categories did not exist in the 1987 NMES.

27. As in the case of the uninsured under-65 population, it is assumed that this group's share in total drug expenditures is equal to just under half of its share of the total population.

28. Health Care Financing Administration, *Medicare and Medicaid Statistical Supplement*, pp. 14, 18-19, and Bureau of the Census, *Statistical Abstract of the U.S., 1993*.

whom are under age 65). The rest would be caused largely by those who have private insurance and would receive better health insurance coverage under the Administration's proposal.

Medicare's new drug benefit could increase the demand of the 65-and-over population for outpatient prescription drugs by about 4 percent. Since one-third of all prescription drug expenditures are made by people 65 and over, and 77 percent of prescription drug expenditures are outpatient, this increased demand would raise total prescription drug expenditures by approximately 1 percent. Many Medicare enrollees already have prescription drug coverage through retirement plans. Much of this increase would be caused by those who have only private medigap coverage, which usually does not include prescription drug insurance, and the 11 percent of Medicare enrollees who have no supplemental coverage at all.

Overall, CBO estimates that the universal coverage provision and the Medicare drug benefit proposed by the Administration would increase total prescription drug expenditures by approximately 4 percent to 6 percent.